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REMARKS

In accordance with the foregoing, claims 1, 4, and 11 are amended. New claims 12-15 are presented. No new matter is presented in any of the foregoing and, accordingly, approval and entry of the amended and new claims are respectfully requested.

Claims 1-15 are pending and under consideration.

Claims 1-2 and 6-11 are rejected under 35 U.S.C. §102(b) as being anticipated by Kuwahara (U.S.P. 6,202,072); claims 3 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kuwahara, in view of Fong et al (U.S. Pub. 2002/0085032 AI); and claim 4 is rejected 35 U.S.C. §103(a) as being unpatentable over Kuwahara, in view of Fong and further in view of Poole (US 6,006,242).

The rejections are traversed.

CLAIM AMENDMENTS

Claims 1 and 11 are amended, using claim 1 as an example, to clarify that a structural documentation system converts "plain text data into a structured document" having a predetermined document structure and includes a reading module defining "for each of the elements, a condition of a pattern of character string possibly contained in the plain text data as an extraction condition." (See, for example, page 53, starting at line 20).

Claim 4 is amended to replace the term --till-- with "until."

No new matter is presented in any of the foregoing and, accordingly, approval and entry of the amended claims are respectfully requested.

Traverse of Rejections

According to aspects of the present invention, a structural documentation system generates a structured document applied to a plain text data without regard for specific contents. According to aspects of the present invention, extraction is executed based on conditions of a pattern of a character string. (See, for example, FIG. 11, and page 12, starting at line 4). Thus, related parts are extracted regardless of their position in the plain text.

Kuwahara teaches (See, for example, col. 2 lines 20-30) an apparatus for processing SGML documents by generating a conversion form between a prototype document having a specific form and a document type definition by correlating structural elements in the prototype document to those in the document type definition respectively.

Fong teaches (See, for example, paragraph 11) a graphical user interface for processing information encoded in a structured information format to transform the information into another

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structured information format, and which allows a user to interactively define the mapping for the transformation.

Poole teaches (See, for example, col. 2, lines 13-20) an apparatus and method for dynamically constructing electronic and printable documents and forms using an entity reference read from a document and compared to entity identifiers provided in a catalog containing a plurality of entity identifiers.

An *arguendo* combination of Kuwahara and Fong teaches processing SGML documents by generating a conversion form between a prototype document having a specific form and a document type definition by correlating structural elements in the prototype document to those in the document type definition respectively and allows a user to interactively define the mapping for the transformation.

An *arguendo* combination of Kuwahara, Fong, and Poole teaches processing SGML documents by generating a conversion form between a prototype document having a specific form and a document type definition by correlating structural elements in the prototype document to those in the document type, allows a user to interactively define the mapping for the transformation, and uses an entity reference read from a document and compared to entity identifiers provided in a catalog.

Rejection Of Independent Claim 1(And Dependent Claims 2, 6-10) Under 35 U.S.C. §102(b) By Kuwahara

The Examiner rejects independent claims 1 (and dependent claims 2 and 6-10) as being anticipated by Kuwahara. (Action at pages 2-4).

In contrast to the cited art, independent claim 1, as amended, recites a structural documentation system converting "plain text data" into a structured document having a predetermined document structure including "a reading module that reads definition information defining a correlation between elements as basic units configuring the document structure, and defining, for each of the elements, a condition of a pattern of character string possibly contained in the plain text data as an extraction condition, and an identifier thereof."

Kuwahara does not teach converting plain text data into a structured document and that an extraction condition as a pattern of a character string itself. Rather, Kuwahara teaches (See, for example, FIGs. 2-3 and col. 2, lines 35-40) generating "a conversion table for conversion between a prototype document having a specific form and document type definition by correlating fields of the prototype document to tags of the document type." That is, Kuwahara teaches a conversion condition that requires a position of a cell within a table where a text corresponding to a meaning allocated to the cell is contained. For

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example, Kuwahara teaches (col. 5, lines 45-52):

> . . . It is necessary to show what structure each of the fields for name, department, and address have in the document type definition in order to generate a SGML conversion form relating to this application form.

Since, Kuwahara teaches a rule for.converting from a table ("prototype of plain text document") to a structural document and conversion from a table ("plain text document" of the "same form as prototype") to a SGML document, the processing is not applied to "plain text" but rather to a table in which positions of contents are recognized at an earlier time. Since Kuwahara teaches that extracted contents cannot be correlated in a case of the prototype applied to an unrelated table, the "prototype" can be applied only to a document that is same form as the prototype.

Conclusion

Since features of independent claim 1 (and dependent claims 2 and 6-10) are not taught by the cited art, the rejection should be withdrawn and claims 1 allowed.

Rejection Of Independent Claim 11 Under 35 U.S.C. §102(b) By Kuwahara

The Examiner rejects independent claim 11 as being anticipated by Kuwahara. (Action at pages 2-4).

Independent claim 11, as amended, recites a computer-readable storage storing a program for controlling a computer to perform conversion by "reading plain text data; (and) reading definition information that defines a correlation between elements as basic units configuring a document structure of a structured document, and that defines, for each of the elements, a condition of a pattern of character string possibly contained in the plain text data as an extraction condition, and an identifier thereof.";

Kuwahara does not teach converting plain text data into a structured document and that an extraction condition as a pattern of a character string itself. Rather, Kawahara teaches a conversion condition that requires a position of a cell within a table where a text corresponding to a meaning allocated to the cell is contained. .Therefore, the processing of Kawahara is not applied to plain text but rather to a table in which positions of contents are recognized at an earlier time.

Conclusion

Since features of claim 11 are not taught by the cited art, the rejection should be withdrawn and claim 11 allowed.

Rejection of dependent claims 3 and 5 under 35 U.S.C. §103(a) as being unpatentable over Kuwahara, in view of Fong

The Examiner rejects dependent claims 3, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwahara in view of Fong. (Action at pages 4-6).

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Claim 3 recites a structural documentation system wherein a "retrieving module extracts regions coincident with respective extraction conditions of the elements in the lower-order hierarchy out of a region extracted with reference to an extraction condition of the element in its higher-order hierarchy, and said structured document generating module adds tags in front and rear of the region extracted by said retrieving module with respect to the element embracing o element in lower-order hierarchy. . . . "

Claim 5 recites a structural documentation wherein a "retrieving module extracts each region coincident with one of said extraction conditions of the elements in the lower-order hierarchy with reference to the extraction condition of the sequenced element in the lower-order hierarchy out of a region from a portion just after an already-extracted region coincident with another extraction condition of the element in lower-order hierarchy within the region extracted with reference to the extraction condition of the element in its higher order hierarchy. . . . "

The Action concedes that Kuwahara does not expressly teach the features recited in dependent claims 3 and 5 but that the features are taught by Fong and there is motivation to modify Kuwahara with Fong to allow interactive use. (Action at pages 5-6).

Applicant submits that none of the cited art, alone or in combination, teaches features recited by claim 3 and claim 5, using claim 3 as an example, of a "retrieving module extracts regions coincident with respective extraction conditions of the elements in the lower-order hierarchy out of a region extracted with reference to an extraction condition of the element in its higher-order hierarchy." That is, the extraction does not necessarily use tags.

Fong teaches (See, for example paragraphs 90-93) a processing of HTML text data to SGML text data, and a conversion requiring tags added to the HTML text as keys. Thus, Fong does not teach a conversion without any tags.

Conclusion

Since features of dependent claims 3 and 5 are not taught by the cited art, alone or in combination, *prima facie* obviousness is not established and the rejection should be withdrawn and claims 3 and 5 allowed.

Rejection of dependent claim 4 under 35 U.S.C. §103(a) as being unpatentable over Kuwahara, in view of Fong and Poole

The Examiner rejects claim 4 under 35 U.S.C. 103(a) as being unpatentable over Kuwahara in view of Fonq and further in view of Poole. (Action at pages 7-8).

Dependent claim 4 recites a structured documentation system wherein "correlation between the elements shows a hierarchical structure in which said element in a higher-order hierarchy embraces an element in a lower-order hierarchy that has a repetitive structure,

said retrieving module repeatedly extracts regions coincident with the extraction condition of an element in the lower-order hierarchy having the repetitive structure out of the region extracted with reference to the extraction conditions of the element in its higher-order hierarchy until no region coincident with the extraction conditions of the element in the lower-order hierarchy can be extracted."

The Action concedes that Kuwahara does not teach features but the features are contends taught by Fong and Poole, and motivation exists to modify Kuwahara.

Applicant submits that none of the cited art, alone or in combination, teaches features recited by claim 4 of a "retrieving module repeatedly extracts regions coincident with the extraction condition of an element in the lower-order hierarchy having the repetitive structure out of the region extracted with reference to the extraction conditions of the element in its higher-order hierarchy." That is, the extraction does not necessarily use tags.

Fong teaches a processing of HTML text data to SGML text data, and a conversion using tags added to the HTML text as keys. Poole does not teach a conversion without tags but instead Poole teaches (col. 2, lines 13-20) using an entity reference read from a document and compared to entity identifiers provided in a catalog containing a plurality of entity identifiers.

Conclusion

Since features of dependent claim 4 are not taught by the cited art, alone or in combination, *prima facie* obviousness is not established and the rejection should be withdrawn and claim 4 allowed.

NEW CLAIMS

New claims 12-15 present no new matter and are provided to afford a varying scope of protection.

New claims 12-13 recite a method of conversion including "reading plain text data; (and) reading definition information that defines a correlation between elements as basic units configuring a document structure of a structured document, and that defines, for each of the elements, a condition of a pattern of character string possibly contained in the plain text data as an extraction condition, and an identifier thereof."

New claims 14-15 recite a structural documentation system for converting plain text data into a structured document having a predetermined document structure, including "a reading module that reads definition information defining a correlation between elements as basic units configuring the document structure, and defining, for each of the elements, a condition of a pattern of character string possibly contained in the plain text data as an extraction condition, and an identifier thereof."

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These, and other, features of claims 12-15 patentably distinguish over the cited art, and are submitted to be allowable for the recitations therein

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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